



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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May 24, 2000

Mr. Larry Tucker
Engineering Field Activity, NW
Naval Facilities Engineering Command
19917 7th Avenue NE
Poulsbo, WA 98370-7570

360-396-0053.

Tucker LJ @ chanw. navfac.
navy.mil.

Dear Mr. Tucker:

Re: Ecology Comments on Draft Site Hazard Assessment Gorst Landfill

The Washington State Department of Ecology has reviewed the above-referenced document and is providing our comments. Since we discussed these comments last week during our phone conversation, I don't anticipate that they will come as a surprise. Also, please understand that I didn't review the document in exhaustive detail as I might for a Record of Decision. Consequently, there might be small items or issues that are not covered in these comments. Once you have had a chance to collect all of the comments from the various reviewing parties, I think it would be beneficial for all of us to meet.

Please be aware that since the site shows evidence of contamination and since the detection limits for many of the analytes were greater than the applicable regulatory standards, Ecology will not be conducting a ranking of the site. Instead we are proposing that the Navy begin scoping a remedial investigation.

As always, if you have any questions or concerns regarding these comments, please call me at (360) 407-7240.

Sincerely,

Peter C. Brooks, P.E.
Project Manager

PB:gj
Enclosure

cc: Michael Spencer, Ecology

Comments on Draft Site Hazard Assessment Gorst Landfill

General Comments

G-1: Some analytical results were compared with Washington State's Model Toxics Cleanup Act (MTCA) industrial standards instead of residential standards. The selection of industrial standards is an error on two counts. First, MTCA is clear that industrial cleanup standards are only applied to facilities that fit the definition in MTCA which includes being zoned industrial by the local government with jurisdiction for such designation. It has not been demonstrated that the landfill portion of the site is so designated and industrial activities are not taking place there today. Second, most of the samples were collected from locations and media not directly on or from the landfill mass. These samples should not be compared to industrial standards but to residential standards, which is what most of the surrounding properties are.—

G-2: For a number of analyses, the laboratory was unable to obtain detection limits that were lower than the applicable MTCA residential standard. The upshot of this is that the results of those analyses are inconclusive and thus Ecology does not know that there is no excessive risk. Instead of re-sampling the media in question and reanalyzing, I am recommending that a RI be conducted to inform remedial design decisions. The presumptive remedy for an improperly closed landfill would be to cap it and install ground water monitoring wells. To know for certain whether that should be the remedy, additional investigation on, in, under, and around the landfill should be undertaken.

G-3: It was encouraging to learn that no contaminants had reached the ground water wells selected for sampling. However, that does not rule out the possibility of ground water contamination occurring immediately beneath the landfill.

G-4: Ecology is concerned about surface water quality upstream of the landfill. The elevated pH and the presence of mercury in excess of the water quality standards suggest other problems in the watershed. Although these issues may not be the Navy's responsibility, they are of concern to Ecology.

Specific Comments

S-1: The Method B residential standard for PCB in soil (0.13 ppm) is exceeded in samples GL-SS-03, GL-SS-04, and GL-SS-05.

S-2: The freshwater ambient water quality standard for mercury (0.012 ppb) is exceeded in sample GL-SW-01. This sample was apparently taken from upstream of the landfill. The detection limit of the sample obtained from downstream of the landfill exceeded the appropriate standard and thus it is not possible to determine the effect of the landfill on the surface water regarding mercury.

S-3: As noted in the document, both surface water samples had a pH in excess of Water Quality Standards. In fact, the upstream pH of 9.9 is quite high for a salmon stream in western Washington. A pH of 9.0 is considered the upper end of the healthy pH range for salmonids. The document notes that the calcium ion concentration increases downstream of the landfill relative to the one upstream measurement. The authors hypothesize that the presence of concrete (pipe or rubble) accounts for this. Why then does the pH decrease after the water is exposed to concrete? Doesn't the reduction in pH rather suggest that acid leachate could be emanating from the landfill?